

**Department of Ecology – Water Quality Program
Development of Low Impact Development (LID) Standards for the
Municipal Stormwater General Permits**

**Advisory Committee Kick-off Meeting
October 13, 2009 – Tacoma Convention Center, 9:00 – 3:30
MEETING SUMMARY**

Goal of the Meeting: This was the first meeting for the project, and was a joint meeting with both the Technical and Implementation Advisory Committees. The purpose of the meeting was to introduce the advisory committee members, and to receive input on the project objectives and proposed process for the upcoming Advisory Committee meetings.

Agenda

Welcome Comments and Introductions – Josh Baldi and Bill Moore, Ecology

Overview: Objectives of the Advisory Committee Process – Bill Moore, Ecology

- Overview of PCHB Rulings re LID
- Objectives of the Advisory Committee Process

Overview: Advisory Committee Expectations – Kate Snider

- Advisory Committee Expectations and Logistics
- Public Involvement

Advisory Committee and Public Input on Objectives and Expectations

Overview: Issues, Sequencing and Coordination between the Committees

- Issues to be addressed
- Coordination Between the Committees, Proposed Meeting Schedule
- Proposed Issue Sequencing and Meeting Topics

Preliminary Discussion of LID Definitions

Brainstorming Session Regarding the Definition of Feasibility

Discussion of Potential Reference Materials

Attendees

A list of attendees is provided at the end of this meeting summary.

Transcription of Flip-Chart Notes

The meeting summary provided here is a transcription of the flip-chart notes taken by Kate Snider during the meeting. This does not provide a full documentation of the dialogue, but provides a record of the primary input received from the attendees.

OBJECTIVES AND EXPECTATIONS OF THE ADVISORY COMMITTEE PROCESS

The handout provided at the meeting includes an overview of the advisory committee objectives as presented. The summary below documents the input provided by committee members and the public attendees.

Advisory Committee Input

- Need to evaluate and model how LID BMPs actually function.
- The purpose is to save the resource. What does science tell us is necessary. to preserve the resource – streams to sound?
- Ecology should describe for the group what they see as challenges re implementation of LID in the permits. That would allow the group to better target advice.
- Should there be continuity between industrial and municipal permit requirements?
- The definition of feasibility is crucial: Engineering, Cost and Physical characteristics
- Address ability for continued maintenance as part of feasibility.
- Acknowledge uncertainty and allow for application of new approaches: document performance and allow for adaptive management.
- Greater emphasis should be placed on maintaining natural hydrologic functions - avoidance and prevention of harm.
- LID brings together stormwater management and land use planning. How do we accomplish that
- Feasibility depends on point in time. Practices deemed to be not feasible now certainly may be in the future. How do performance standards change with time?
- Keep committee discussions from getting stuck in rhetoric.
- Concern from reviewing the agendas that committee discussions will get mired in discussion of planning at the watershed scale and site planning. How much time really should be spent discussing the basin scale?
- Ecology: Board directly told us that we need to implement LID in permit language, but that we also need to do more to address LID in the larger scale.
- How does this process fit with GMA and other landuse regulations? Need to harmonize the two.
- Very interested in big picture issues. Need to acknowledge how site specific impacts the big picture.
- Consider bringing in other regional experts for discussion of specific topics.
- How to implement LID in low density areas, including maintenance over time.
- Ensure that we can be proud of the outcomes of this process and that they will be used. Give clear direction on topics, homework.

- There may be a need for legal input – can Ecology bring any legal support to the project?
- Acknowledge that many LID practices are currently in research and development – set up permit requirements to include ability to periodically revisit.
- Feasibility determinations should focus on protecting the resource – feasibility determinations should be made about the development project...is a development project feasible or not relative to ability to protect the resource.
- What is feasibility relative to? Feasible compared to what we normally do? Is the project constructible at all?
- Explore incentives as well as regulation for implementing LID.
- Reiterate the need for a good product from this process. Shoot for as much common ground as possible. Concerned about disconnect between the input received in this process and the actual permit revisions.
- Early in the committee process, think about options for how to require LID, so that those can be considered in the discussions.
- Increase feedback from Ecology. Provide Ecology perspectives on issues, as needed throughout the committee process, not just at the end.
- Can permit allow for innovation? For instance, have a technical equivalent concept or focus on performance standards.
- Look to local jurisdictions to streamline the process and innovation. How to allow and provide incentives.

Public Input

- Address underground injection control requirements. Current practices will not meet current drinking water standards. Is there Ecology expertise that can participate in addressing this potential regulatory conflict?
- Need regulatory language to incentivize new technologies – current regulatory and acceptability barriers.
- Significant concern re LID definition. Ultimate goal is to mimic predevelopment conditions.
- Include practicality and understanding of municipalities costs – requirements for municipal implementation, inspection, municipal staffing. Concerned about how to implement the permit and incentives -- going from inspecting 100s of permits a year to thousands. Consider a cost element to feasibility as well.
- Address retrofitting existing systems not just construction of new facilities – consider performance standards for retrofits as well.
- Primary constraints are jurisdictional barriers. But some barriers are realistic (e.g.: fire access, backyard inspection).
- Focus initially on LID definition and feasibility. LID definition should consider requirement for non-toxic exterior materials.

- In discussing feasibility, address developers cost and marketing to home buyers – acceptability of LID components to homeowners, need for homeowner maintenance.
- In evaluating LID cost impacts, recognize significant infrastructure costs if don't do LID. (but those costs are not currently paid directly by developers).
- New technology should not be restricted by regulation.

ISSUES AND SEQUENCING

The handout provided at the meeting includes a proposed sequence of topics and preliminary agendas for the advisory committee meetings. The summary below documents the input provided by committee members and the public attendees.

Advisory Committee Input

- Need liasons between committees. A few members will be at all meetings (Bill, Kate, Bruce, John, and Ed). Members can crossover to attend other committee meetings just as the public can attend.
- Too much emphasis is being put on basin planning in the preliminary agendas. Don't see that level of emphasis in the PCHB Ruling.
- More time should be spent on implementation at the site/subdivision scale.
- More emphasis should be spent by the Implementation Committee discussing "feasibility" – it is not a purely technical issue.
- Basin scale discussion is important as context for how site/subdivision implementation fits into overall framework.
- Although the first step is site/subdivision scale implementation, the PCHB expects that basin/watershed scale will be subsequently addressed.
- Make ideas about basin/watershed tools available for review before 1st meeting, for example retention of natural vegetation in the watershed.
- Acknowledge that basins/watersheds cross jurisdictional boundaries, making implementation of LID at the basin scale particularly complex.
- Too much emphasis seems to be being placed on practices not functions – don't get myopic on individual BMPs. Innovative ideas can fit into functions - but not if we talk about practices and individual BMPs rather than functions.
- What is the administrative reach of the NPDES permit relative to land use practices? Shouldn't be working outside the scope of what Ecology is tasked to do as part of the NPDES permit updates.
- Need to go back to ruling and understand role of NPDES permit
- Reference was made to paragraph 17 of the PCHB Ruling stating that LID at the basin or watershed level not be considered at this time. Although it is understood that the basin scale is being addressed as context, basin shouldn't consume the discussion.

- Technical committee should revisit LID definition again at the beginning of the 2nd meeting.
- In the PSP work, the LID definition is different at the different scales.
- Goal is to start broad, with a wide range of input and then focus on implementation under near term permits.
- It could be useful to educate the committees on the roles everyone plays in the development process – someone from government and development community discuss?
- Sort BMPs by function so that BMPs can be mixed and matched to meet performance standards

Public Input

- Need definition of LID before discussing feasibility.
- Do basin scale infiltration and detention facilities have a role in LID?
- Reach out to other regions. There is an LID conference in April in San Francisco regarding emerging technologies.
- Provide introduction to Committees about how the Municipal Stormwater Permit works and how it relates to the development and construction process – clearly define what Ecology wants for input to permitting.
- Focus on function (rather than spec BMPs) allows for innovation and different sequencing.
- More time should be devoted to discussion of feasibility.
- Add Feasibility to Implementation Committee Meeting # 2.
- If define performance criteria as function then up to different sites/development as to how to meet performance criteria. Set criteria with flexibility regarding how to do it rather than being prescriptive.
- Be smart about tension regarding not using unproven technologies that may fail while allowing innovation and adaptive management.
- Consider providing initial input to Committees re: components of watershed health.
- Is there a linkage with the Puget Sound basin monitoring effort? Stormwater monitoring workgroup is holding a Nov 10th public workshop. There may be a tie in.
- Regarding incentives, the action agenda requires PSP to deal with possible LID incentives. Bruce Wishart will consider convening a separate parallel group to talk about incentives, which could help to streamline this process.
- Recognize though that southwest Washington not part of PSP – incentives input from PSP should feed into this group for use outside the Puget Sound region
- Regarding incentives – some LID practices provide intrinsic cost savings.

- Don't forget education component: regulation – incentives – education. Education of homebuyers is very important.
- Is there available funding for BMP monitoring? Adaptive management needs funding to do it.
- Integrated management practices, cost effective, don't serve only one function, bioswale for SW can serve as open space requirement. Other environmental or sustainability functions.
- Consider integration of LID into open space requirements.

Potential Material to Provide Before 1st Mtgs

- Info re watershed processes
- Info re government – development steps and role of NPDES in municipal permits
- Examples of definitions of LID
- Starting point for basin scale practices and site/subdivision practices
- Info re related codes and land use practices - administrative codes and local ordinances
- List of BMPs by functions not practices
- Examples of how LID has been added to local codes
- APWA Stormwater Managers Feasibility Matrix
- Select listing of research on certain LID techniques

Input re: LID Definition

Because there was time available, the group did an initial brainstorm discussion regarding LID Definition. This work is a preview...each Advisory Committee will more formally address this issue in the initial meetings.

- Maintain focus on stormwater
- Include concept of retrofit of an urban area – not just new suburban development
- Include traditional infiltration facilities
- When discussing “small scale and distributed” BMPs, what is small scale?
- The challenge is that it's not specific enough
- Performance standards are not specific enough
- Different definitions -- one for watershed scale and one for site/subdivision scale. At the watershed scale: minimize changes to natural hydrology; mimic natural function.
- Overall goal is no measureable impact to receiving waters.
- Think about a definition appropriate to urban and redeveloping areas.
- Large infiltration facilities should not be removed from consideration

Brainstorm re: Feasibility

Because there was time available, the group did an initial brainstorm discussion regarding the meaning of “if feasible”. This work is a preview...each Advisory Committee will more formally address this issue in the initial meetings.

- Include soil type, geologic hazards, high groundwater, slope where applicable to practices
- Practical considerations of engineering design
- Municipal Feasibility Matrix has proposed components of feasibility
- Financial/cost of LID practices vs. traditional stormwater practices
- Maintenance practices– ability to maintain and cost
- Acceptability by user/homeowner/community
- Acceptable risk: In some areas if an LID practice fails it results in only minimal impact – in others, a failure may be catastrophic. Is there a backup system?
- Think in terms of what the PCHB board met by “feasible”.
- If we can do it – it’s feasible.
- Legal definition of feasible -- should receive Attorney General input.
- Feasibility of scale – at what scale is it feasible? In its entirety or partial?
- Process – is a Feasibility Analysis needed? How is that determined?
- Will jurisdictions require a feasibility analysis?
- Feasibility cost issues – engineering, design, maintenance, bonding, marketing
- Availability of expertise to install.
- Ability to inspect and maintain.
- Pollutant removal to the maximum extent practicable? –LID could be required
- Practicable – Reasonable – Feasible – all of these words come into play
- Background would be helpful on AKART, MEP, and the legal definition of feasible
- Retrofit urban development – available space is an important component of feasibility
- Some low impact BMPs are applicable at every site – smaller footprint, preservation of natural vegetation, stacking of usable space, limiting impervious surface, preservation of forested areas, etc.
- Certain LID principles are possible in certain areas, not in others. At certain sites land use prohibits infiltration, e.g. existence of contaminated soils.
- LID may be feasible but a specific performance goal may not be achievable.
- Green roofs, rainwater harvesting are not constrained by soil type, slope, etc.
- Set up a performance goal – then ingenuity will provide a technique.

- Concern that LID technology may drive goals of a project
- Refocus the question...if LID is not implementable, should the development project be feasible?
- Cascadia's Barriers to Implementing LID Technologies looked beyond regulatory barriers when implementing technologies in Vancouver and Clark County

Attachment 1
Meeting Attendees

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